



## Course: Tomography for industrial applications

18 March 2020

### Venue

LINXS, Lund, Sweden

Welcome to a 1-day introduction course on tomography in workshop format within NextBioForm. We will mix conventional teaching with hands-on training using a kitchen-based light tomograph (KBLT) set-up in the lecture room. We will finish the day with a visit to the 4D X-ray Imaging Laboratory at Lund University, followed by dinner. This course is aimed at introductory level and should be seen as a translator for industrial applications. It aims to give an understanding of what tomography can be used for and what results one can expect and how to interpret them.

### Part 1

Use the KBLT set-up which uses 'normal' light from a flashlight, where the different steps involved in a measurement will be demonstrated: 1) scanning, 2) image reconstruction, 3) image processing & analysis 4) 3D-rendering. Every participant will be encouraged to bring a sample of choice in the millimeter-centimeter regime (transparent if possible) to the lecture hall for measurement.

### Part 2

A visit to the 4D X-ray Imaging Laboratory, Lund University, where you will be showed a real X-ray microtomography instrument which uses X-rays instead of normal light as in the KBLT.

### Who is this course intended for?

The course is relevant for industry people, PhD students and researchers with no prior knowledge of this technique.

### What will this course give me?

This course provides an introduction to the tomography technique including practical hands-on training using normal light and a visit to the 4D X-ray Imaging Laboratory at Lund University.

### Lectures

Dr. Stephen Hall (LINXS) and Dr. Emanuel Larsson (RISE)

*This course gives 2 HP after completion.*

### Documentation

Copies of slides with adjoining comments and a list of suggested literature.

## Fee

- NextBioForm partner organizations: 1300 SEK
- PhD students outside NextBioForm: 1600 SEK
- Other participants: 6500 SEK

The fee covers all tuition costs, lunch, coffee breaks and dinner. Accommodation is not included in the fee.

Cancellation up to 14 Days before the event 100% refund, cancellation 14-7 days before the event 50% refund. No refund if you cancel **later** than 7 Days before the event. After informing the organizers a colleague can take your place if you cannot participate.

## Time

The course takes place 18 March at 10:00 (registration and coffee from 09:30). There will be a dinner in the evening.

## Language

English

## Venue

LINXS - Lund Institute of advanced neutron and S-ray Science Lund. [Map](#).

## Final date for registration

11 March

## Registration

[Register here](#).

## Questions about the course content or the opportunity to arrange in-house courses at your company:

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## Questions regarding registration:

Contact: Rose-Marie Larsson, RISE  
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*This course is organized by [RISE Research Institutes of Sweden](#) in the framework of [NextBioForm](#) - a competence centre for formulation and processing of biologics.*